

Patent claims

- 5 1. An escalator or moving sidewalk with a frame to form a supporting structure between entry and exit, characterized in that the frame (12) is made at least partially of perforated plate (20), with the holes (hole cut-outs) being provided in particular in the side surfaces of the frame and in particular over a significant part of the frame height, preferably roughly one half the frame height.
- 10 2. The escalator or moving sidewalk as claimed in claim 1, characterized in that the holes or hole cutouts are round and that in particular their edges are free from straight sections.
- 15 3. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the holes or hole cut-outs have a round, oval and/or ellipsoid form.
- 20 4. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the perforated plate frame (12) exhibits two side plates (14) and one base plate (18) that are fixedly joined together or welded together in order to form an essentially U-shaped construction.
5. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the side plates (14) are welded to the base plate (18) , in particular by laser welding.

6. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the side plates (14) form the same hole pattern and in particular are symmetrical to one another.

5

7. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the holes in the two side plates (14) are arranged such that adjacent holes are offset from one another.

10

8. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the base plate (18) exhibits a hole pattern symmetrical to the longitudinal centerline.

15

9. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that ribs (38) are fastened, in particular welded, to the base plate (18) that stiffen the base plate (18) against bending.

20

10. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the hole pattern (20) of the perforated plates is produced by laser cutting.

11. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that end side plates and an end base plate are formed at the entry and exit that are cropped according to the inclination of the escalator

(10).

12. The escalator or moving sidewalk as claimed in claim 11, characterized in that middle side plates and middle base plates extend between the end side plates and the end base plate and are prefabricated in a given length of, for example, 4 m or possibly in a given length that is larger than 4 m.

13. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the base (18) and side plates (14) prefabricated with the same hole pattern are prefabricated in a given length of 2 m to 6 m, preferably roughly 4 m, and are joined on site, in particular by welding.

14. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the hole pattern in the perforated plates is characterized by a ratio between plate and air of less than 3:1, in particular somewhat less than 2:1.

15. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that profiled sections facing inwards are attached to side plates (14), in particular by welding, that serve for the mounting of travel rails for the rollers of the escalator steps or moving sidewalk pallets.

16. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the side plates (14) that extend perpendicularly to the step or pallet band of the escalator or moving sidewalk (10) are stiffened by welded-on ribs

(36).

17. The escalator or moving sidewalk as claimed in Claim 16, characterized in that the welded-on ribs (36) also extend between the holes.

5

18. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the largest holes cover roughly 60% of the side plate height and the smallest holes in the side plate cover roughly 20% of the side plate height and that small and large holes are arranged alternately.

10

19. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the side plates (14) and the base plate (18) are assembled with longitudinal welds from plates of different thickness and/or strength, depending on the desired load-bearing strength.

15

20. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the supporting construction exhibits a transverse frame with a predefined width and into which the base plate (18) can be laid or to which the base plate (18) can be fastened.

20

21. The escalator or moving sidewalk as claimed in one of the preceding claims, characterized in that the supporting construction exhibits mountings for further constructional parts for which in particular the exact relative position between the right-hand and left-hand side is fixed.